

An optical fiber device comprising:

a housing having a wall, wherein said housing is vacuum drawn and pressurized with a gas to prevent moisture from entering said housing;

an optical fiber holding tube extending through said wall and having a first end and a second end, said first end of said optical fiber holding tube contained in said housing and said second end of said optical fiber holding tube located outside of said housing;

a plurality of optical fibers extending from said first end of said optical fiber holding tube to said second end of said optical fiber holding tube without interruption; and

a gas blocking device attached to said first end of said optical fiber holding tube, wherein said optical fibers extend through said gas blocking device, and wherein said gas blocking device contains material surrounding said optical fibers such that said gas blocking device creates a seal substantially preventing gas from passing through said optical fiber holding tube.

- 2. The optical fiber device according to claim 1, wherein said gas is nitrogen.
- 3. The optical fiber device according to claim 1, further including a water seal sealing an interface between said wall and said optical fiber holding tube extending through said wall.

4. The optical fiber device according to claim 1 wherein said gas blocking device includes:

a fiber containing body having a passageway containing said plurality of fibers; and

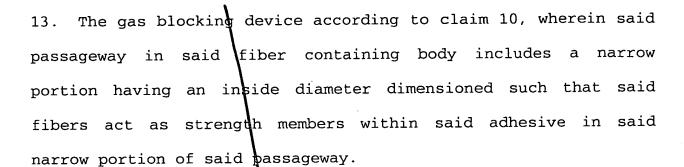
a fiber organizing insert secured at one end of said fiber containing body such that said fiber organizing insert is prevented from rotating with respect to said fiber containing body, wherein said fiber organizing insert includes a plurality of fiber receiving holes each receiving respective ones of said plurality of fibers.

- 5. The optical fiber device according to claim 4, further including a locking member securing said fiber organizing insert to said one end of said fiber containing body.
- 6. The optical fiber device according to claim 4, wherein said passageway in said fiber containing body includes a wide portion, a narrow portion, and a tapered portion between said wide portion and said narrow portion, and wherein said fiber organizing insert is secured within said wide portion.
- 7. The optical fiber device according to claim 4, wherein said fiber organizing insert is made of a substantially non-compressible material.
- 8. The optical fiber device according to claim 4, wherein said

fiber containing by and said fiber holding ube are made of a conductive metal and are soldered together.

9. The optical fiber device according to claim 1, wherein said material is hot melt glue.

- 10. A gas blocking device for use at one end of an optical fiber holding tube holding a plurality of fibers, said gas blocking device comprising:
- a fiber containing body having a passageway, wherein said plurality of fibers pass from said optical fiber holding tube through said passageway;
- a material for least partially filling said passageway of said fiber containing body and surrounding said plurality of fibers passing through said passageway; and
- a fiber organizing insert secured at one end of said fiber containing body and being prevented from rotation with respect to said fiber containing body, wherein said fiber organizing insert has a plurality of fiber receiving holes each receiving respective ones of said plurality of fibers.
- 11. The gas blocking device according to claim 10, wherein said fiber organizing insert is made of a substantially non-compressible material.
- 12. The gas blocking device according to claim 10, further including a locking member securing said fiber organizing insert



- 14. The gas blocking device according to claim 13, wherein the ratio of the cross-sectional area of said fibers to the cross-sectional area of said narrow portion is about 1/2.
- 15. The gas blocking device according to claim 13, wherein said passageway in said fiber cantaining body includes a wide portion and a tapered portion between said wide portion and said narrow portion.
- 16. The gas blocking device according to claim 15 wherein said material is hot melt glue.
- 17. A gas blocking device assembly for use with an optical fiber holding tube holding a plurality of optical fibers, said gas blocking device assembly comprising:
- a fiber containing body having a passageway for receiving said plurality of fibers from said optical fiber holding tube and for receiving a material to seal said fibers;
  - a fiber organizing insert adapted to be positioned at one

end of said fiber containing body, wherein sold fiber organizing insert includes a plurality of preformed fiber receiving holes for receiving respective ones of said plurality of fibers, wherein said fiber organizing insert and said fiber containing body include cooperating key structures for preventing rotation of said organizing insert when positioned at said one end of said fiber containing body; and

a locking member adapted to lock said fiber organizing insert to said one end of said fiber containing body.

- 18. The gas blocking device assembly according to claim 17, wherein said cooperating key structures include at least one recess in said fiber organizing insert and at least one locking key projecting from said one end of said fiber containing body.
- 19. The gas blocking device assembly according to claim 17, wherein said fiber organizing insert is made of a substantially non-compressible material.
- 20. The gas blocking device assembly according to claim 17, wherein said passageway in said fiber containing body includes a wide portion, a narrow portion, and a tapered portion between said narrow portion and said wide portion, and wherein said wide portion is adapted to receive said fiber organizing insert.

